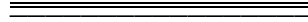
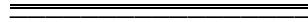


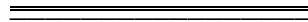
The Bill Blackwood Law Enforcement Management Institute of Texas



The Need for Implementation of a Tactical Emergency Medicine Support Unit Within a Law Enforcement Tactical Team



A Leadership White Paper Submitted in Partial Fulfillment Required for Graduation from the Leadership Command College



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May 2016**

ABSTRACT

Special Weapons and Tactics (SWAT) and tactical teams are formed to handle some of the most dangerous missions of a law enforcement agency. Active shooter, armed barricaded subjects and hostage situations are just a few. During these events there is likelihood a SWAT or tactical team operator, patrol officer or civilian will become a victim of major trauma. Policies for most if not all EMS providers prohibit their personnel from entering an unsecured area until law enforcement has designated the area secure and safe (Heiskell, 2006). The problem is that the time it takes to stabilize a situation, a person who sustains a traumatic injury can bleed to death (Ritchey, 2014).

The solution to this problem is to assure that all SWAT and tactical teams have a Tactical Emergency Medical Support Unit (TEMS). The TEMS units are specially trained in Tactical Combat Casualty Care (TCCC). This means that they are trained and equipped to provide “care under fire” to the wounded in hostile or austere environments (Butler, Haymann, & Butler, 1996, p. 4). A TEMS unit can also support the SWAT or tactical team during trainings or extended deployments. The TEMS units can monitor the well-being of all operator’s physical condition, keeping operators at their peak performance (Peregrin, 2010). Recently the National Tactical Officers Association has updated their guidelines recommending TEMS be a part of SWAT and tactical teams (National Tactical Officers Association, 2015). Implementation of a TEMS unit within a SWAT or tactical team will ensure the availability of quick medical interventions to wounded officers and civilians thus saving lives.

TABLE OF CONTENTS

	Page
Abstract	
Introduction	1
Position	4
Counter Position	7
Recommendation	9
References	12

INTRODUCTION

Tactical Emergency Medical Support (TEMS) as it pertains to civilian law enforcement is a concept of taking emergency medical services (EMS) personnel and integrating the EMS medic into a law enforcement Special Weapons and Tactics (SWAT) team or law enforcement tactical team. TEMS is relatively new to both the military and civilian medical profession (Waldman, Shapira, Richman, Haughton, & Mechem, 2014). The beginning of TEMS in law enforcement began in the late 1980's and early 1990's (Campbell, Heiskell, Smith & Wipfler, 2012). The base for the programs came from the United States Military who had developed Tactical Combat Casualty Care (TCCC) programs for the special operations groups of all branches of the United States Armed Forces. The idea was to enhance the chances for success of these units by allowing them to operate in areas near their limits in a reasonably safe manner (Vayer et al., 2003).

TEMS has its roots in military history as far back as the Napoleonic wars. The first modern field medicine was incorporated to transport injured soldiers off of the battlefield and to transport them to a field hospital during battle (Schwartz, McManus, & Swienton, 2008). The progression led to the corpsman programs of World War II and Vietnam. Although these systems integrated medics into combat units they were only trained in very basic trauma care. The main task of corpsmen was to get the soldiers off the field of battle as soon as possible and into field hospitals. TCCC was the next progression. Medics were trained in advanced trauma and medical care allowing a broader range of treatment in the field (Malish, 2009). This training would allow units to take on missions that were not possible in the past and bring home wounded soldiers

that would have died (Vayer et al., 2003). TEMS is the current form of tactical medicine having medics training in TCCC as well as Advanced Life Support (ALS).

A TEMS team can be made up of either a law enforcement officer (LEO) certified and trained in EMS, or an external team made up of non-law enforcement personnel such as fire department based TEMS unit or private EMS-based TEMS units. The preferred model embeds a LEO medic specially trained in Tactical Combat Casualty Care (TCCC) into a SWAT or tactical team. The medic will also fill a role as a tactical operator if the current situation needs an operator. Another model of TEMS would integrate civilian non-armed personnel into the SWAT unit or tactical team as a medic only (Schwartz, McManus, & Swienton, 2008). Both LEO and civilian medics will be formally trained in advanced life support protocols as well as being proficient in TCCC. Although there are differences in the basics of the two models both concepts are designed to provide for “care under fire” (Butler, Haymann, & Butler, 1996, p. 4). This is the primary basis for the implementation of such a unit. Providing advanced life support or TCCC in locations that are still hostile, austere or where it may not be possible to get the wounded to a hospital quickly (Vayer et al., 2003).

TCCC incorporates interventions such as hemorrhage control using tourniquets, hemostatic agents and standard hemorrhage control. TCCC also incorporates other interventions such as airway management, field analgesia, and fluid resuscitation among others (Waldman et al., 2014). This intervention along with advanced life support (ALS), which include intravenous (IV) therapy and drug administrations, are intended to keep patients alive if they are not able to be easily or quickly transported to the hospital (Campbell et al., 2012). This allows a TEMS unit the ability to provide

advanced medical care to personnel when an event happens. Having this ability will assure immediate care or as close to immediate care as can be started as soon as possible. A person who sustains a traumatic arterial injury can bleed to death in as little as one to three minutes (Ritchey, 2014). Furthermore, studies by the United States military have shown that if trauma care is given within the first 30 minutes the chance of survival is greatly increased (Vayer et al., 2003).

Although the primary role for TEMS is to provide assistance to SWAT or tactical team personnel, the unit will also be available to provide medical assistance to suspects or civilians who are injured. Recent active shooter events, such as the Virginia Tech, and the Aurora, Colorado incidents, have made it necessary for agencies to prepare for the possibility of an active shooter event or terrorist attack (Heiskell & Tang, 2015). The implementation of a TEMS unit will be a part of a comprehensive plan for the preparedness for such an event. During an active shooter event or terrorist attack, EMS personnel will not be able to respond due to tactical concerns for their safety (Heiskell, 2006). A TEMS unit will be able to enter the unsecured or “hot” zone to provide medical assistance for the victims of an active shooter or terrorist incident. The unit will be able to either treat, or evacuate wounded civilians and first responders, which may have become disabled during the onset of the event (Waldman et al., 2014). Because of their training TEMS unit members are uniquely qualified to handle types of penetrating wounds commonly suffered by victims in these incidents, and increase the likelihood that the wounded will survive the incident.

Law enforcement agencies who have SWAT or tactical teams should develop and incorporate a Tactical Emergency Medical Support (TEMS) unit into their overall

special operations structure. TEMS units will increase the ability, professionalism, and overall capability of any SWAT unit or tactical team.

POSITION

Tactical Emergency Medical Support units can save lives. SWAT and tactical teams are formed and operate to handle the most complex and dangerous missions that a law enforcement agency will handle. Call ups such as armed barricaded suspects, hostage situations, and high risk warrant service are a few examples (Peregrin, 2010). These high risk operations have the potential for serious injury to SWAT and tactical team operators, civilians and suspects.

Many times EMS is present at the command post or a staging location near the event. Policies for most if not all EMS providers prohibit their personnel from entering an unsecured area until law enforcement have designated the area is secure and safe (Heiskell, 2006). There is a likelihood a person involved in the incident will become a victim of a major trauma either through a violent act of the suspect, an accident, or the actions of law enforcement trying to resolve the issue. Even though a SWAT or tactical team is present the area, incidents require the time to secure an area in order to allow EMS to come into the scene (Morrissey, 2011).

The protocols of a TEMS unit will allow them to provide “care under fire”. The TEMS medics are embedded with the SWAT team either as an operator or as a standalone medic (Butler, Haymann, & Butler, 1996, p. 4). They are specifically trained to work in the hostile environments SWAT or tactical teams are exposed to, and provide immediate medical care to anyone who requires it before the area is secure if necessary (Vayer et al., 2003). Being able to provide the immediate care will increase the chance

of survival of the wounded. Seconds count when dealing with the types of trauma involved with gunshot wounds. TEMS units are specifically trained to mitigate the issues associated with penetrating wounds (Peregrin, 2010). The first five minutes after being critically wounded is critical. If needing to transport the wounded out of the zone, there is a possibility that five minutes will pass causing a delay in care (Heiskell, 2006). TEMS teams have specific training to mitigate the bleeding wounds by the use of tourniquets and hemostatic agents. These protocols are not to repair the wound but to buy needed time to allow the stabilization of the scene to allow the evacuation of the victim or the arrival of EMS (Butler, Haymann, & Butler, 1996).

TEMS not only supply emergency trauma care but can provide support to a SWAT or tactical team during extended deployments. There are times that operational periods exceed 12-18 hours. The TEMS units responsibility during these operations it to monitor the individual operators physical condition throughout the operation. Hydration, rest rotations and nutrition are key during extended operations to keep the SWAT or tactical team elements at their peak performance (Peregrin, 2010).

SWAT and tactical teams are required to train regularly. The training by its nature is designed to be as realistic as possible to ready these warriors for the obstacles they may face during an operation. Because the training can be intense and very physically demanding, having a TEMS unit attached to the SWAT or tactical team will augment the team during training. The majority of injuries that occur to SWAT or tactical team operators happens during training (Bozeman, Morel, Black & Winslow, 2012). Training scenarios and physical requirements demanded of the operator during a training exercise can cause unexpected injuries or a physical crisis. The presence of

a TEMS unit at the trainings can mitigate health problems sometimes before they occur (Peregrin, 2010). During the planning of a training event, the leader of a TEMS unit can advise the team leader of the SWAT or tactical team what pitfalls can be expected based on the type of training, weather, or location of training. This can allow the team leader to make quality decisions on what training to conduct and to what degree of physical activity the team can be expected to perform (Heiskell, 2006). The TEMS unit will train as part of the SWAT or tactical team to build the confidence of the team and will also be at the training if needed for any and all medical issues that occur.

The physical wellbeing of the SWAT or tactical team is also of great importance to assure the team will be able to accomplish the missions it is tasked with. Law enforcement officers as a whole suffer from early mortality and poor health. A study commissioned by the Brevard County Sheriff's Office in Florida showed that law enforcement personnel in the study died at an average age of 62.4 while the general population had an average age of death of 74.2 (Parker, 2011). Part of the job of a TEMS unit is the everyday health of the SWAT or tactical team operators. Education and monitoring the health of team operators is done to assure their continued readiness for the job (Campbell et al., 2012).

Finally, best practices and current federal standards for SWAT and tactical teams include the integration of a TEMS unit (Bozeman et al., 2012). The National Tactical Officers Association (NTOA) have recently updated their guidelines for tactical and SWAT teams. One of the recommendations is the implementation of a TEMS unit attached to SWAT and tactical teams (National Tactical Officers Association, 2015). The NTOA has also begun to provide training for TEMS units and are attempting to set

a national standard for TEMS (NTOA). As with all parts of law enforcement adherence to and policies built around best practices will help shield the law enforcement agency from liability as well as assuring that the TEMS unit is properly constructed and monitored.

COUNTER POSITION

There are some arguments against the incorporation of a Tactical Emergency Medical Team into tactical or SWAT teams. The most obvious argument deals with the liability incurred by an agency if they decide to provide medical care. Medical care carries with it a separate set of liabilities and responsibilities. Depending on the type of TEMS unit, the team may be able to possess and administer narcotics, perform advanced lifesaving services and provide trauma care that even regular EMS protocols will not allow. Litigation for malpractice in the healthcare field has driven the price of liability insurance for practitioners to all-time highs (Lewis, 2012). An agency would either have to self-insure or maintain an insurance policy that would cover the agency in the event of a lawsuit for malpractice. The liability would outweigh the possible good that a TEMS team would provide and burden already strapped budgets of law enforcement agencies (Whitehead, 2007).

The above argument, while weighty, does not have merit. Law enforcement agencies are already steeped in liability. Due to the dynamics of the SWAT or tactical team environment, the liability of causing injury or death of an operator, suspect or civilian is ever-present. Law enforcement officers are obligated to provide medical assistance to injured people especially if officers were forced to take action and caused the injury. The liability for causing this injury will be greatly lessened if a trained and

certified tactical medic were able to begin treatment immediately. A failure of a law enforcement agency to prepare for immediate emergency medical care for suspects, civilians or operators can open up the agency to liability for tort suits that can result in judgements of millions of dollars (Heiskell & Tang, 1999). The grounds for a lawsuit will be lessened because of the quick and specific treatment that can be provided by the medic (Warner, 2013).

Agencies can indeed self-insure; however, most medics will be working under protocols approved by a physician and the liability for the performance of EMS duties may fall under the liability insurance of the carrying physician. The medical director, or physician carrying the protocols for the TEMS unit will assume the majority if not all of the legal and medical responsibility for the medics in the field (Schwartz, McManus, & Swienton, 2008).

Another argument against a TEMS unit is the cost. Training, overtime, equipment and certifications are all costs involved with a TEMS unit (Whitehead, 2007). Some will argue that money should not be spent on the TEMS unit and that the money spent will never be recovered and the slim chance of the TEMS unit actually being utilized is small.

The argument of cost seems to be a valid point. However, the actual cost to start a TEMS unit breaks down to approximately 8% of the operating cost of the SWAT or tactical team budget. The startup cost can be as little as one hundred twenty hours of salary per unit member and four thousand dollars for initial training and equipment (Sharp, 2010). The yearly cost afterward will be significantly less.

Another factor that is usually not calculated is the cost in the event a law enforcement officer dies in the line of death. The cost to governmental entities for a line of duty death of an officer is high. In Texas, the initial death benefit paid to the surviving family of an officer includes a \$333,604 dollar payment from the federal government and an additional \$500,000 paid by the State of Texas ("Survivor," n.d.). In addition to immediate payments, all surviving children of the officer are available to attend a state funded school free of charge. This will amount to approximately \$80,000 for a four year degree (www.collegeforalltexas.com, 2015). The figures above do not include private benefits, life insurance or any direct cost to the agency the officer worked for at the time of his death. There will also be indirect costs associated with the death. The loss of the officer will most likely cause others directly involved in the incident to be provided psychological treatment support.

RECOMMENDATION

All law enforcement agencies with tactical or SWAT teams should start and maintain Tactical Emergency Medicine Support units as part of these teams. TEMS units will enhance the performance of tactical teams. The units will allow them to perform missions safer than before and have a unit embedded to immediately treat wounded operators, suspects or civilians who may have become injured during any critical incident (Vayer et al., 2003). TEMS can also support the teams at trainings where most team injuries occur. TEMS can provide support for teams that have been deployed to long operations requiring the monitoring of operators for dehydration, fatigue and other factors that could inhibit team performance when needed. TEMS will also be involved in a comprehensive team preventative medical program to improve the

health and fitness of operators. Overall health and fitness can help to mitigate the effects of law enforcement (Campbell et al., 2012). The improvement may help mitigate early mortality of law enforcement officers as shown by the mortality study by the Brevard County Sheriff's Office (Parker, 2011). And finally as shown by recent changes in federal standards for tactical teams and also recommendations from the NTOA that show TEMS units should be part of a comprehensive tactical or SWAT team (Bozeman et al., 2012).

Some think that the cost and liability of a TEMS unit should prevent the implementation of the units. The research shows that the initial cost is small overall and the benefits to the team over time and also the ability to keep an operator alive if they are seriously injured far outweigh the initial and operating costs (Sharp, 2010). It has also been shown that law enforcement agencies have a duty to provide necessary EMS service to injured suspects and civilians. A TEMS unit will help to mitigate the liability allowing a medic to immediately provide care that would be delayed without a TEMS unit (Warner, 2013). The immediate care will help to lower the liability that an agency faces when they have to take action to stop suspects from taking violent actions.

Agencies can form their own TEMS unit. The first and most important part is to plan out the process and get buy in from all the stakeholders that will be affected. Agencies should procure funding from the governing body or through grants (Sharp, 2010). Administrators should decide if the unit will be made up of law enforcement officers or if the team will consist of EMS or Fire Department personnel and should carefully choose the personnel to actually be the TEMS members (Schwartz, McManus, & Swienton, 2008). Administrators should then locate quality certified training for the

TEMS members and have them certified by the state licensing board for emergency medicine. Administrators should find a doctor to help draft and carry the protocols the TEMS unit will work under and then procure the equipment for the unit. Administrators should then assure the unit trains regularly and trains with the tactical or SWAT team they will be working to protect. Stakeholders should then decide who will carry the insurance to cover the unit (Vayer et al., 2003). The most important thing to consider is contacting several agencies with TEMS units and ask them how they have implemented their units. Furthermore, administrators should ask what has worked for them and what has not worked for those units. Like the old adage says “don’t remake the wheel”.

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